

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application :

WHAT IS CLAIMED IS:

1. (Presently amended) An apparatus for connecting aircraft-certified equipment and to other equipment of uncertain certification level, said apparatus comprising:

a communication link between the aircraft-certified equipment and the other equipment;

an isolator in the communication link adapted to electrically electromagnetically isolate the aircraft-certified equipment from the other equipment; and

a controller adapted to selectively interrupt communication between the aircraft-certified equipment and the other equipment.

2. (Original) The apparatus of claim 1 wherein the controller selectively interrupts communication by at least one of modifying a power level of electrical power supplied to the other equipment, interrupting at least a portion of the data communication link, blocking at least a portion of a data flow between the aircraft-certified equipment and the other equipment, and providing a command to the other equipment.

3. (Original) The apparatus of claim 1 wherein the controller is adapted to selectively re-permit communication after communication has been interrupted.

4. (Original) The apparatus of claim 1 wherein the controller selectively interrupts communication from the other equipment to the aircraft-certified equipment but substantially permits continued communication from the aircraft-certified equipment to the other equipment.

5. (Original) The apparatus of claim 1 wherein the apparatus is adapted to provide electrical power to the other equipment from an aircraft-based source of electrical power to which the apparatus is connected, and where the controller is adapted to selectively interrupt said electrical power.

6. (Original) The apparatus of claim 1 wherein the controller is activated based on an automatically-acquired input indicative of a operational status of at least one of an aircraft, an aircraft-based system, an aircraft engine, an aircraft engine system and the aircraft-certified equipment.

7. (Original) The apparatus of claim 6, wherein the input is acquired from the aircraft-certified equipment.

8. (Original) The apparatus of claim 7, wherein the input is acquired from an aircraft engine controller.

9. (Original) The apparatus of claim 6, wherein the input is indicative of flight cycle status, and wherein the other equipment includes unshielded equipment which interferes with safe aircraft operation when used, and wherein the controller interrupts communication by de-powering the unshielded other equipment when the input indicates the flight cycle has commenced.

10. (Original) The apparatus of claim 1, wherein the controller comprises at least two independent controllers.

11. (Original) The apparatus of claim 10, wherein the at least two independent controllers are responsive to different control inputs.

12. (Original) The apparatus of claim 1, wherein the aircraft-certified equipment is flight-critical.

13. (Original) The apparatus of claim 12, wherein the aircraft-certified equipment includes at least one of an aircraft engine control system and an aircraft flight control system.

14. (Original) The apparatus of claim 1, wherein the apparatus is adapted to isolate the aircraft-certified equipment from transient voltages transmitted to the apparatus by the other equipment.

15. (Original) The apparatus of claim 1, wherein the other equipment is adapted for communication with the Internet.

16. (Original) The apparatus of claim 1, wherein said interruption is temporary, and wherein a duration of said interruption is determined by the controller.

17. (Original) The apparatus of claim 1 further comprising intrinsic protocol conversion between aircraft protocols and consumer electronic protocols.

18. (Original) An apparatus for connecting aircraft data systems to non-aircraft data systems, the apparatus comprising:

a communication apparatus permitting data communication therethrough between at least one aircraft data system and at least one non-aircraft data system; and

a control apparatus adapted to receive information from an aircraft-based source, the information indicative of at least one control parameter, wherein the control apparatus is adapted to initiate at least one control operation on the non-aircraft data system based on the received at least one control parameter.

19. (Original) The apparatus of claim 18, wherein the at least one control operation is selected from the group of at least partially interrupting said data communication, modifying said data communication, interrupting electrical power supplied to the non-aircraft data system and modifying electrical power supplied to the non-aircraft data system.

20. (Original) The apparatus of claim 19, wherein at least partially interrupting said data communication includes permitting continued communication from the aircraft data system to the non-aircraft data system.

21. (Original) The apparatus of claim 18, wherein the at least one aircraft data system is flight-critical.

22. (Original) The apparatus of claim 18, wherein the at least one aircraft data system is selected from the group comprising an aircraft engine controller and an aircraft avionics system.

23. (Original) The apparatus of claim 18, wherein the at least one control operation is non-specific to the non-aircraft data system.

24. (Original) The apparatus of claim 18, wherein the at least one non-aircraft data system primarily adapted for ground-based use, and wherein the device is substantially a commercially-available consumer data system.

25. (Original) The apparatus of claim 18, wherein the at least one non-aircraft data system uncertified for aircraft in-flight use.

26. (Original) The apparatus of claim 18, wherein the at least one non-aircraft data system is substantially electromagnetically unshielded relative to the aircraft data system.

27. (Original) The apparatus of claim 18, comprising a portion of a certified aircraft system, and wherein the non-aircraft data system is an electronic device.

28. (Original) The apparatus of claim 27 further comprising intrinsic protocol conversion between aircraft protocols and consumer electronic protocols.

29. (Presently amended) The apparatus of claim 18, wherein the communication apparatus includes an isolation apparatus for electrically electromagnetically isolating the aircraft data system and non-aircraft data system.

30. (Presently amended) A method of isolating flight-critical aircraft equipment and from other equipment connected thereto, the method comprising the steps of:

connecting the equipment to permit communication therebetween;
automatically acquiring a signal indicative of an aircraft operational status;
automatically changing an operational status of the other equipment

based on the automatically acquired signal indicative of the aircraft operational status.

31. (Original) The method of claim 30 wherein the step of changing the operational status of the other equipment includes reducing power supplied to the other equipment.

32. (Original) The method of claim 30, wherein the step of changing the operational status of the other equipment includes interrupting data transmission from the other equipment to the aircraft equipment.

33. (Original) The method of claim 30, wherein the signal is acquired from an aircraft engine and is indicative of an engine operational status.

34. (Original) The method of claim 30, wherein the signal is acquired from an aircraft sensor and is indicative of an aircraft operational status.

35. (Presently amended) A method of employing consumer/industrial equipment in connection with aircraft equipment on board an aircraft, the method comprising the steps of:

providing an interface for data communication between the consumer/industrial equipment and the aircraft equipment,

automatically controlling the consumer/industrial equipment with at least one input received from the aircraft equipment and indicative of an operational status, wherein said controlling includes at least one of interrupting data transmission from the consumer/industrial equipment to the aircraft equipment and interrupting power provided to the consumer/industrial equipment.